

Application No.: 10/774,329

Docket No.: 00152-00267-US

IN THE CLAIMS:

1-2. (canceled)

3. (currently amended) An electrically heated liquid kettle according to Claim 1 comprising a vessel for holding a liquid for extraction of tea, coffee, or other food material, said vessel including a partially open immersible container sized to allow passage of liquid between the walls of said vessel, said container being capable of holding the material while providing an opening in said container to allow entrance of liquid therein upon immersion of said container in liquid, said heated kettle incorporating structure to hold said container out of the liquid until the liquid reaches appropriate extraction temperature and to immerse or withdraw said container into or from liquid as necessary to accomplish the extraction, and where said structure to hold said container out of liquid is a mechanical arm actuated by an electromagnetic solenoid that presses against a physical feature of said container.

4. (previously presented) An electrically heated liquid kettle according to Claim 3 with an electrical switching structure to actuate said electromagnetic solenoid to hold or release said container.

5. (currently amended) An electrically heated liquid kettle according to Claim 1 comprising a vessel for holding a liquid for extraction of tea, coffee, or other food material, said vessel

Application No.: 10/774,329

Docket No.: 00152-00267-US

including a partially open immersible container sized to allow passage of liquid between the walls of said vessel, said container being capable of holding the material while providing an opening in said container to allow entrance of liquid therein upon immersion of said container in liquid, said heated kettle incorporating structure to hold said container out of the liquid until the liquid reaches appropriate extraction temperature and to immerse or withdraw said container into or from liquid as necessary to accomplish the extraction, where said structure to hold said container is an electromagnet, and said container including a ferromagnetic structured element attracted and held by a magnetic field of said electromagnet.

6. (currently amended) An electrically heated liquid kettle according to Claim 1 containing said partially open immersible container, comprising a vessel for holding a liquid for extraction of tea, coffee, or other food material, said vessel including a partially open immersible container sized to allow passage of liquid between the walls of said vessel, said container being capable of holding the material while providing an opening in said container to allow entrance of liquid therein upon immersion of said container in liquid, said heated kettle incorporating structure to hold said container out of the liquid until the liquid reaches appropriate extraction temperature and to immerse or withdraw said container into or from liquid as necessary to accomplish the extraction, said opening to allow entrance of liquid at least in part being a meshed screen, and an adjustable shutter adjacent said screen to permit the adjustment of the effective area of the entrance of liquid.

Application No.: 10/774,329

Docket No.: 00152-00267-US

7. (currently amended) An electrically heated liquid kettle according to Claim 1 comprising a vessel for holding a liquid for extraction of tea, coffee, or other food material, said vessel including a partially open immersible container sized to allow passage of liquid between the walls of said vessel, said container being capable of holding the material while providing an opening in said container to allow entrance of liquid therein upon immersion of said container in liquid, said heated kettle incorporating structure to hold said container out of the liquid until the liquid reaches appropriate extraction temperature and to immerse or withdraw said container into or from liquid as necessary to accomplish the extraction, and including user operated electrical controls to preprogram the desired extraction temperature and to preprogram the desired brewing time.

8. (previously presented) An electrically heated liquid kettle according to Claim 7 including an electrical processor to store a more than one combination of programmed temperature and times selected for different brewing conditions and to permit user access to said combinations.

9-17. (canceled)

18. (previously presented) An electrically powered heated kettle comprising a lidded but unsealed vessel for holding a vaporizable liquid, a heater capable of heating the liquid in said vessel to the boiling point of the liquid at the prevailing atmospheric pressure, an electrical control to preset the desired temperature of the liquid, an electrical signal processor directed by

Application No.: 10/774,329

Docket No.: 00152-00267-US

said electrical control to direct a controller of the flow of electrical power to said heater, an electrical sensor to generate an electrical signal proportioned to the temperature of the liquid or the air/vapor mixture directly above the liquid in said vessel as the liquid is heated by said heater to the boiling point, and to transmit said signal to said electrical processor, whereby said processor can determine therefrom when the liquid is boiling, to determine and store the exact value of temperature of said boiling point and to prevent the subsequent adjustment of said set desired temperature to any value above said boiling temperature as established by said processor.

19. (canceled)

20. (new) An electrically heated liquid kettle comprising a vessel for holding liquid for extraction of tea, coffee, or other food material, said vessel including an immersible container designed to hold the food material, sized to allow passage of liquid around said container and constructed with multiple adjustable openings to control the rate of liquid flow into and out of said container upon immersion of said container into the liquid, and said heated kettle incorporating structure to hold said container out of the liquid until the liquid reaches appropriate extraction temperature and to immerse into or withdraw container from the liquid as necessary to accomplish said extraction.

21. (new) An electrically heated kettle comprising a vessel for holding liquid for extraction of tea, coffee, or other food material, an immersible container with multiple adjustable openings

Application No.: 10/774,329

Docket No.: 00152-00267-US

designed to hold the food material and to allow flow of liquids or its vapors into and out of said container through said openings and said kettle incorporating a holding structure to hold said container in the vapor space in order to allow the food material to absorb the vapors of the heated liquid until the liquid in said kettle reaches appropriate extraction temperature and to permit immersion into and withdrawal from the heated liquid to accomplish said extraction.

22. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea, or other food material comprising an immersible container with adjustable openings designed to hold the food material and to allow flow of liquids or its vapors into and out of said container thru said openings, an electric heater, a user control panel, and an electrical controller and an electrical processor to direct said electrical controller to heat the extracting liquid to a temperature programmable by the user on said control panel to actuate an audible or light announcing when the liquid has reached the pre-selected temperature and to hold the liquid at that temperature until the user by way of said control panel directs the processor to initiate a brewing cycle.

23. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea or other food material according to Claim 22 containing structure to hold said container in the vapor space in order to allow the food material to absorb vapors of the heated liquid while the liquid is being heated.

Application No.: 10/774,329

Docket No.: 00152-00267-US

24. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea, or other food material according to Claim 23 where said control panel provides a switch that when actuated causes the processor to automatically release said container into the liquid when it reaches the programmed brewing temperature.

25. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea, or other food material according to Claim 22 where said electrical controller includes an electrical relay to apply full power to the heater, and a zero-crossing driver with a triac that is activated and de-activated many times each second in a time based pulse-width modulation manner to permit the application of either full power to said heater or to reduce the effective power to the heater to only that level sufficient to maintain the liquid at the programmed brewing temperature.

26. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea or other food material according to Claim 22 where said user control panel comprises user actuated switches to select the temperature for brewing the food material, and the brewing time and the keep-warm temperature after brewing with visual or audible indicators or when the liquid reaches the brewing temperature and when the brewing time is completed.

27. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea or other food material according to Claim 22 where said container is manually removable from the liquid.

Application No.: 10/774,329

Docket No.: 00152-00267-US

28. (new) An electrically heated kettle for holding liquid for extraction of coffee, tea or other food material comprising an electrical heater, an electrical thermal detector responsive to the temperature of the liquid or its vapor, an electrical processor, and an associated data storage device to accept and store in said data storage device the electrical signal created by said detector while the liquid is being heated and to calculate the rate of rise of that electrical signal and to store the value of that electrical signal at the instant in time that the rate of temperature rise goes to zero, so that the value of signal can be utilized by said processor to anticipate the beginning of boiling at the local atmospheric pressure and to reduce the electrical power applied to the heater to prevent continuous boiling of the liquid.

29. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea or other food material according to Claim 3 where said container is manually removable from the liquid.

30. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea or other food material according to Claim 5 where said container is manually removable from the liquid.

31. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea or other food material according to Claim 6 where said container is manually removable from the liquid.

32. (new) An electrically heated kettle for holding liquid for the extraction of coffee, tea or other food material according to Claim 7 where said container is manually removable from the liquid.